THE HYPNOTIC ACTION OF LACTIC ACID AND THE LACTATE OF SODA. N. Jerusalimsky *Moskowski Wratschevni Westnik*, 1876, No. 7, (*Abstr. in St. Petersburger med. Wochenschr.*) Induced by a communication of W. Preyer in the *Centralblatt*(" Schlafe durch Ermuedungsstoffe hervorgerufen") Jerusalimsky carried on a series of experimental and clinical investigations on lactic acid and lactate of soda. Some of the animals experimented on gave no definite results, hence the author concludes that they were unsuited for the purpose. In several healthy individuals (2 women and three men) the medicine in considerable doses, produced only moderate effects.

Clinically, the effects of lactic acid were observed in twenty-two cases of sleeplessness in the course of quite different diseases, among them five cases of hysteria, and in only a very small proportion was the effect *nul* or undecided. In most, sleep followed the administration in one half to one hour. A fact published by Lothar Meyer, *Virchows Archiv.* 1876, Hft. I, is noteworthy in this connection; *viz.* that the addition of a very small amount of lactate of soda to morphia in obstinate hysterical sleeplessness, is very effective. Contraindications to these remedies are any kind of disorders of the intestinal tract.

COLCHICINE. The following are the conclusions of a recent memoir by M. J. Rossbach, *Pfluegers Archiv*, XII, VI. 308, on the physiological action of colchicine.

1. Colchicine is a very slow poison which kills animals in comparatively small doses.

2. The carnivora are the most susceptible to this poison, the herbivora and omnivora, less so, and the cold-blooded animals, least of all.

3. The intensity of the toxic action and the duration of life after poisonous doses, are not very dependent upon the size of the dose.

4. The central nervous system, after a preliminary excitement, becomes paralyzed.

5. The irritation stage of the spinal functions in the frog, is best shown by the appearance of cramps of the extensors. Still, in many frogs, this is absent, and in most warm-blooded animals, the indications of this stage are altogether wanting, or at least, are very insignificant, so that the paralysis seems to come on at once.

6. The final paralysis of the nervous system is alike complete in all animals. The gray matter of the cerebrum is paralyzed (loss of sensation and consciousness), as is also the reflex apparatus of the spinal cord (complete loss of reflex excitability). The respiratory centre is likewise rendered less active, and is finally paralyzed entirely.

7. The peripheral terminations of the sensory nerves are also paralyzed.

8. The motor nerves and the striated muscles, on the other hand, are probably not affected by colchicine.

9. The circulatory organs are but slightly affected in all animals. The heart beats with unaltered force almost to death, and beats still long after the death of the central nervous system, and after the cessation of breathing; its final death appears not to be due to the drug, but to the secondary alterations of the blood.

The inhibitory apparatus of the heart seems to be affected only at a late stage; the muscular-motor nerves are not affected.

The blood-pressure continues for a long time at its normal height, to sink at last, gradually toward death.

10. The mucous membrane of the stomach and intestines is strongly injected, especially in warm-blooded animals; it is ecchymosed and swollen, and blood exudes into the intestinal tube; the cause of this is as yet obscure. The results are severe colicky pain, vomiting and diarrhea.

The abdominal vagus and the splanchnic, remain unparalyzed during the most of the course of the disease.

11. The secretion of the very hyperæmic kidneys, is diminished by colchicine.

12. Death from colchicine in warm-blooded animals is brought about by the failure of the respiration.

The practical conclusions deduced by the author are unfavorable to the therapeutic use of colchicine for any purpose. The opinion of some observers that it is useful in dropsical and gouty troubles, may he thinks, be accounted for by the pain relieving action of the drug, and not by any action it possesses in increasing the urinary excretion.

NERVE STRETCHING IN TETANUS. G. W. Callender, F. R. S., writes as follows in the *Lancet*, July, p. 317.

In a paper read before the Abernethian Society, (*St. Bartholomews, Hosp. Rep.* XI. 1875. p. 287) Mr. Milner has advocated the treatment of tetanus by nerve stretching, and in some observations on this operation upon nerve trunks (*Clin. Soc. Trans.* VII. 1874. p. 100), I have expressed my regret in narrating a case of tetanus, that the peroneal nerve was not exposed and stretcked. Since this was written no case of traumatic tetanus has come under my care, but had the opportunity been given me, I should certainly have planned an operation such as I have indicated, supposing, of course, that the nature of the case permitted me to stretch a nerve-trunk between the site of injury, and the nerve centres. I am glad to hear that quite recently M. Verneuil has had under his care in La Pitie, a case which he will, I hope, soon publish. A man had suffered from a severe crush on the hand, and following this, showed the symptoms of tetauns. M. Verneuil exposed the median nerve at the elbow, and the ulnar at the wrist, and proceeded to exercise traction on them. The patient recovered completely.

I hope that this note may lead to a further trial of this method of treatment. The operation is not a severe one. The nerve is exposed and is stretched, when freed from its surroundings, by traction with an ordinary vulsellum, from its central connections. No harm is likely to be sustained as a consequence. There is now abundant evidence, in the cases reported by Billroth, Nussbaum, and myself, of the tolerance with which nerves submit to forcible stretching, so far as the after-performance of their functions is concerned. In view of the unsatisfactory results of the treatment of traumatic tetanus as at present conducted, there is full justification for be performance as, at least, a last resource, although I should myself advo-